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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/667,144

09/19/2003

Michael T. Carley

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WORKMAN NYDEGGER  
1000 EAGLE GATE TOWER,  
60 EAST SOUTH TEMPLE  
SALT LAKE CITY, UT 84111

EXAMINER

BACHMAN, LINDSEY MICHELE

ART UNIT

PAPER NUMBER

3734

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/667,144	<b>Applicant(s)</b> CARLEY ET AL.	
	<b>Examiner</b> LINDSEY BACHMAN	<b>Art Unit</b> 3734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17,36-44,50 and 52-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17,36-44,50 and 52-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8-28-09</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 August 2009 has been entered.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**Claim 17, 37, 39-44, 50, 52, 54-59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zadno-Azizi et al. (US Patent 5,907,893) (Zadno'893) in view of Chuter (US patent 6,942,691).**

Claim 17, 40: Zadno'893 teaches a device (600; Figure 20) that has an annular shaped body defining a plane. The body is resiliently deformable from a substantially planar configuration that lies in a plane to a transverse configuration extending out of

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the plane (Figure 21). The device contains a plurality of looped elements (Figure 20) Each looped element contains a curved outer region connected to a curved inner region so that the outer region is out of phase with an adjacent inner region to form an endless sinusoidal pattern.

Zadno'893 does not teach a plurality of tines extending from the looped elements towards the central axis of the annular shaped body.

Chuter'691 teaches that it is old and well known to provide a similar device (Figure 3) for example with a plurality of tines (52, 58 in Figure 1) that are generally parallel with the central axis in the transverse configuration. The curved region (56) limits the penetration depth of the tines. The tines are used to limit migration when the device is implanted in the body (column 5, lines 55-58). It would have been obvious to one of ordinary skill in the art to provide the device of Zadno'893 with tines as taught by Chuter'691 in order to limit migration of the device when implanted in the body.

Claim 37, 39: The tines of Chuter'691 comprise primary tines (52, 58) and secondary tines (52, 58) which all have a length.

Claims 41, 42: Zadno'893 teaches that the device can be made of a single sheet of material of super elastic alloy (column 12, lines 32-38).

Claim 43, 44: The device of Zadno'893 is expandable and compressible due to its material properties.

Claim 50, 55: Zadno'893 teaches a device (600; Figure 20) that has an annular shaped body defining a plane. The body is resiliently deformable from a substantially planar configuration that lies in a plane to a transverse configuration extending out of

the plane (Figure 21). The device contains a plurality of looped elements (Figure 20). Each looped element contains a curved outer region connected to a curved inner region so that the outer region is out of phase with an adjacent inner region to form an endless sinusoidal pattern. Regarding the limitation of a biased spring element, by virtue of the similar shape of the Zadno'893 device to Applicant's invention (specifically the embodiment of Figure 1a), the Zadno'893 device contains a biased spring element.

Zadno'893 does not teach a plurality of tines extending from the looped elements towards the central axis of the annular shaped body.

Chuter'691 teaches that it is old and well known to provide a similar device (Figure 3) for example with a plurality of tines (52, 58 in Figure 1) that are generally parallel with the central axis in the transverse configuration. The curved region (56) limits the penetration depth of the tines. The tines are used to limit migration when the device is implanted in the body (column 5, lines 55-58). It would have been obvious to one of ordinary skill in the art to provide the device of Zadno'893 with tines as taught by Chuter'691 in order to limit migration of the device when implanted in the body.

Claim 52, 54: The tines of Chuter'691 comprise primary tines (52, 58) and secondary tines (52,58) which all have a length.

Claim 56, 57: Zadno'893 teaches that the device can be made of a single sheet of material of super elastic alloy (column 12, lines 32-38).

Claims 58, 59: The device of Zadno'893 is expandable and compressible due to its material properties.

**Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zadno'893 in view of Dwyer et al. (US Patent 5,843,167).**

Claim 36: Zadno'893 teaches a device (600; Figure 20) that has an annular shaped body defining a plane. The body is resiliently deformable from a substantially planar configuration that lies in a plane to a transverse configuration extending out of the plane (Figure 21). The device contains a plurality of looped elements (Figure 20) Each looped element contains a curved outer region connected to a curved inner region so that the outer region is out of phase with an adjacent inner region to form an endless sinusoidal pattern.

Zadno'893 does not teach a plurality of arcuate tines extending from the looped elements towards the central axis of the annular shaped body.

Dwyer'167 teaches that it is old and well known to provide a similar device (Figure 1) with a plurality of arcuate tines (24) that are generally parallel to the longitudinal axis of the device in the transverse configuration in order to provide the advantage of preventing movement of the device along the vessel wall.

**Claims 38 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zadno'893 in view of Chuter'691, as applied to Claims 17 and 50, further in view of Sakura (US Patent 4,214,587).**

Zadno'893 in view of Chuter'691 teach the invention substantially as claimed, but do not teach that the tines are different lengths.

Sakura'587 shows a similar device that contains tines of different lengths (12, 13) in order to have the different tines each serve a different purpose (column 3, line 66 to

column 4, line 7). It would be obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Zadno'893 in view of Chuter'691 with the teachings of Sakura'587 in order to provide the same advantage.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINDSEY BACHMAN whose telephone number is (571)272-6208. The examiner can normally be reached on Monday to Thursday 7:30 am to 5 pm, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on 571-272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/L. B./  
Examiner, Art Unit 3734

/Todd E Manahan/  
Supervisory Patent Examiner, Art Unit 3734